

Application No.: 09/806,842

Docket No.: 220002065000

**AMENDMENTS TO THE CLAIMS**

1-15. (cancelled)

16. (currently amended): A method for identifying an inhibitor of NACP/ $\alpha$ -synuclein aggregation comprising:

providing a test compound, a first sample and a second sample, wherein each sample comprises NACP/ $\alpha$ -synuclein;

inducing NACP/ $\alpha$ -synuclein aggregation in the first sample and second sample by subjecting them to ~~a metal ion~~ an iron-catalyzed oxidative condition, comprising an amount of ferric ion or ferrous ion and hydrogen peroxide effective to aggregate NACP/  $\alpha$ -synuclein;

exposing the first sample to the test compound;

measuring an aggregation level of NACP/ $\alpha$ -synuclein in the first sample and the second sample; and

comparing the aggregation level of NACP/ $\alpha$ -synuclein in the first sample and with the aggregation level of the second sample, wherein less aggregation in the first sample is indicative that the test compound is an inhibitor of NACP/ $\alpha$ -synuclein aggregation.

17. (currently amended): The method of claim 16, wherein the ~~aggregation-inhibitor test compound~~ comprises a non-amyloidogenic protein that inhibits aggregation of NACP/ $\alpha$ -synuclein  $\beta$ -synuclein.

18-20. (canceled)

21. (previously presented): The method of claim 16, wherein the first sample comprises cells that express NACP/ $\alpha$ -synuclein.

22. (previously presented): The method of claim 21, wherein the cells are neuronal cells.

23. (currently amended): The method of claim 22, wherein the neuronal cells comprise [[cell]] cells of the substantia nigra region of the brain.

Application No.: 09/806,842

Docket No.: 220002065000

24. (currently amended): The method of claim 16, wherein the ~~metal ion~~ iron-catalyzed oxidative condition comprises ~~comprise iron ions~~ ferric iron.

25. (currently amended): The method of claim ~~24~~, wherein the iron ~~{{ions}}~~ ion catalyzed oxidative condition comprises ~~comprise a ferric ion or a ferrous ion~~ ferrous iron and hydrogen peroxide.

26. (canceled)

27. (previously presented): The method of claim 16, wherein the first and the second sample are derived from the same source.

28. (previously presented): The method of claim 16, wherein the NACP/ $\alpha$ -synuclein comprises a human recombinant NACP/ $\alpha$ -synuclein.

29-39. (canceled)